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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/521,479

01/18/2005

Teemu Makinen

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6987

32294

7590

09/18/2008

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EXAMINER

FOUD, HICHAM B

ART UNIT

PAPER NUMBER

2619

MAIL DATE

DELIVERY MODE

09/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/521,479	Applicant(s) MAKINEN ET AL.	
	Examiner HICHAM B. FOUD	Art Unit 2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01/18/2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/18/2005, 10/26/2006, 06/08/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. Figures 1-3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
2. The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention. Applicant is required to furnish a drawing under 37 CFR 1.81(c). No new matter may be introduced in the required drawing. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d).

Specification

3. The abstract of the disclosure is objected to because it reads like a claim. Correction is required. See MPEP § 608.01(b).
4. The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

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5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

6. The disclosure is objected to because of the following informalities:

A cross-reference that shows the priority of the instant application needs to be added to the specification.

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.
- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:

- (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
 - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

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- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (l) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

Appropriate correction is required.

Claim Objections

7. Claims 1-13 are objected to because of the following informalities:

Claims 1, 3, 8 and 10 refer to numbers such as (1. and 2.) in claim 1 lines 7 and

14. It is suggested to remove the numbers.

In claim 8, note that claim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure, such as by using the term “ adapted to ” or “adapted for”. Therefore, claim language following this phrase will not be considered.

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Similar problem occurs in claims 9 and 10. It is suggested that Applicant remove this term.

The claims 2, 4, 5-7 and 11-13 are objected because of their dependency on the objected claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "a method for informing a lawful interception system of the serving system serving an intercepted target (MS) roaming within a communication network system". However, there is no recitation of a concrete configuration to implement the cited method, and it is not clear how to carry out said method.

In claim 9 line 3, the term "said serving system node" is vague and indefinite because it is not known if it refers back to the "new serving system node" mentioned in the same claim or to "the serving system node" in claim 8 line 8 or to "another serving system node" in claim 8 line 10. Therefore, the claim is rejected as best understood.

Claims 2-7 are rejected because of their dependency on the rejected claim.

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 3, 5, 6, 8 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Josse et al (US 6,104,929) hereinafter is referred to as Josse in view of Sjoblom (US 7,310,331).

For claims 1 and 8, Josse discloses a method for serving a target (MS) roaming within a communication network system, the communication network system comprising: at least one serving system each serving system comprising at least one serving system node (SGSN) serving the target for communication (see Figure 4A, wherein MS is served by old SGSN and will be served by new SGSN when roamed to the new area), the method comprising the steps of: first detecting a serving system node change request (1.) from the target (MS) towards a new serving system node which is currently not serving the target (see Figure 4A step 4-1 and column 12 lines 9-19; the sending of a routing area update request message), first processing said serving system node change request at said new serving system node currently not serving the target, wherein said processing comprises the inclusion, to the request, of a serving system address of the new serving system node currently not serving the target (see Figure 4A step 4-2a and column 12 lines 22-27; the inclusion of the new SGSN address), and first forwarding said processed request (2.) to an old serving system node currently serving the target (see Figure 4A step 4-2a and column 12 lines 22-27;

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wherein the request is sent to the old SGSN). Josse discloses all the subject matter with the exception of wherein the method is for informing a lawful interception system of the serving system serving an intercepted target (MS). However, Sjoblom discloses a method wherein the serving system informs the lawful interception system of the serving system serving an intercepted target (MS) (see Figure 1 and column 1 line 27 to column 2 line 48; wherein GSN "element 3" is connected to the lawful interception system LEA "element 1" and sending information through the interfaces X0_1, X0_2 and X0_3; such as IRI which is the interception related information). Thus, it would have been obvious to the one skill in the art at the time of the invention to have a connectable lawful interception system to the GSN system as taught by Sjoblom into the method of Josse for the purpose of interception of information and therefore performing a lawful interception.

For claims 3 and 10, Josse discloses a method further comprising second detecting at least one active communication context for said target (see Figure 4A step 4-4a and column 12 lines 64-67; PDP context operations), and in response thereto, generating a communication context update request to which is included the serving system address of the new serving system node currently not serving the target (see Figure 4A step 4-6 and column 13 lines 33-38; wherein the use of the update SGSN address request message that contains the address of the new SGSN), and second forwarding said generated request (6.) to a gateway serving system node (GGSN) of the serving system currently serving the intercepted target (see Figure 4A step 4-6 and

column 13 lines 33-38; wherein the update SGSN address request message is sent from the new SGSN to the GGSN).

For claims 5 and 11, Josse discloses a method wherein said serving system address of the new serving system node represents information about the serving system to which said new serving node belongs (see column 12 lines 35-38; the new address represents information, to which said new serving node belongs, that is required to allow the old SGSN to forward packets to the new SGSN until the old MM context is cancelled).

For claims 6 and 12, Josse discloses a method, wherein said information about the serving system to which said new serving node belongs comprises at least one of the following information items: serving node MSISDN number, serving node routing area identifier, serving node address (see column 12 lines 26-28; the new address, RAI).

10. Claims 2, 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Josse in view of Sjoblom (US 7,310,331) and further in view of Miettinen et al (US 6,754,834) hereinafter is referred to as Miettinen.

For claims 2, 4 and 9, Sjoblom further discloses that GSN node detects and transmits IRI (interception related information) to the lawful interception system, wherein the GSN node can be either SGSN or GGSN (see Sjoblom Fig. 3, column 6 lines 20-25 and column 7 lines 14-16). Josse in view of Sjoblom discloses all the subject matter with the exception of explicitly disclosing wherein said old serving system node currently

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serving the target (SGSN) and said gateway serving system node (GGSN) inform the interception system of the new serving system address of the new serving system node. However, Miettinen discloses that the IRI may include location information that is related to roaming since the location information changes according to the location (see Miettinen column 6 lines 27-35). Thus, it would have been obvious to the one skill in the art at the time of the invention to use the interception method as described in Miettinen into the method of Josse in view of Sjoblom to include the address of the new SGSN in the IRI sent by either SGSN (old or new) or GGSN to the interception system for the purpose of performing a lawful interception that intercepts the target even when the target is roaming in different cells.

11. Claims 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Josse in view of Sjoblom and further in view of Neumann (US 6,792,270).

For claims 7 and 13, Josse in view of Sjoblom discloses all the subject matter with the exception of explicitly disclosing wherein said serving node routing area identifier contains information items representative of a mobile country code MCC, mobile network code MNC, location area code LAC, and routing area code RAC. However, Neumann discloses a method wherein said serving node routing area identifier contains information items representative of a mobile country code MCC, mobile network code MNC, location area code LAC, and routing area code RAC (see column 5 lines 26-29). Thus, it would have been obvious to the one skill in the art at the time of the invention to use the component of the RAI as disclosed in the invention of

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Neumann into the method of Josse in view of Sjoblom for the purpose of clearly identifying a routing area worldwide.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

13. Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

When responding to this office action, applicants are advised to clearly point out the patentable novelty which they think the claims present in view of the state of the art disclosed by the references cited or the objections made. Applicants must also show how the amendments avoid such references or objections. See 37C.F.R 1.111(c). In addition, applicants are advised to provide the examiner with the line numbers and

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pages numbers in the application and/or references cited to assist examiner in locating the appropriate paragraphs.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hicham B. Foud whose telephone number is 571-270-1463. The examiner can normally be reached on Monday - Friday 10-6 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hicham B Foud/
Examiner, Art Unit 2619
09/10/2008

/Wing F. Chan/
Supervisory Patent Examiner, Art Unit 2619
9/14/08